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Chapter 1: The Budget Outlook

Overview

If current laws governing taxes and spending generally remained unchanged, federal deficits would continue to be large by historical standards from 2020 through 2030 and beyond, the Congressional Budget Office projects (see Figure 1-1). As a result of those deficits, federal debt would rise each year, reaching a percentage of the nation's output that is unprecedented in U.S. history.

CBO currently projects a federal deficit of $1.0 trillion in 2020; in its baseline budget projections, deficits average $1.3 trillion per year and total $13.1 trillion over the 2021–2030 period (see Table 1-1). Relative to the size of the economy, deficits would remain above 4.3 percent of gross domestic product (GDP) in every year between 2020 and 2030. Other than a six-year period during and immediately after World War II, the deficit over the past century has not exceeded 4.0 percent for more than five consecutive years. Over the past 50 years, the annual deficit has averaged 3.0 percent of GDP, but it generally has been much smaller when the economy was strong.

Those large deficits would lead to growth in debt held by the public: Under current law, debt held by the public would rise from 79 percent of GDP in 2019 to 98 percent at the end of 2030. Federal debt at that point would be higher as a percentage of GDP than at any time since 1945 and 1946. In the years after 2030, it would continue to increase, reaching 180 percent of GDP in 2050, CBO projects, well above the highest level ever recorded in the United States.

Relative to the projections CBO published in August 2019, the agency's estimate of the deficit for 2020 is now 0.7 percent (or $8 billion) more, and projected deficits over the 2020–2029 period total 1.3 percent (or $160 billion) more.[1] That increase over the next 10 years is the net result of changes that go in opposite directions. Revisions to CBO's economic forecast reduced deficits by $705 billion. However, enacted legislation increased projected deficits by $505 billion through 2029, and all other changes increased them by another $360 billion (see Appendix A).

Relative to the agency's most recent long-term budget projections, published in June 2019, debt held by the public as a percentage of GDP in 2049 is now projected to be 30 percentage points higher.[2]

Deficits and Debt

CBO constructs its baseline in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177, referred to here as the Deficit Control Act) and the Congressional Budget and Impoundment Control Act of 1974 (P.L. 93-344). Those laws require CBO to construct its baseline under the assumption that current laws will generally stay the same. Thus, CBO's baseline is not intended to provide a forecast of future budgetary outcomes; rather, it is meant to provide a benchmark that policymakers can use to assess the potential effects of future policy decisions on federal spending and revenues and, therefore, on deficits and debt.

CBO estimates that, in 2020, the federal deficit will reach $1,015 billion, which is $31 billion more than the shortfall recorded last year. Relative to the size of the economy, this year's deficit would be about the same as last year's shortfall—4.6 percent of GDP—which is the difference between revenues equal to 16.4 percent of GDP and outlays equal to 21.0 percent of GDP.

Ten-Year Projections

Over the next 10 years, deficits are projected to increase by more than 1 percentage point of GDP, rising from 4.3 percent in 2021 to 5.4 percent in 2030. Both revenues and outlays are projected to grow faster than GDP, though the increases in outlays would be larger. Federal revenues rise in CBO's projections, from 16.6 percent

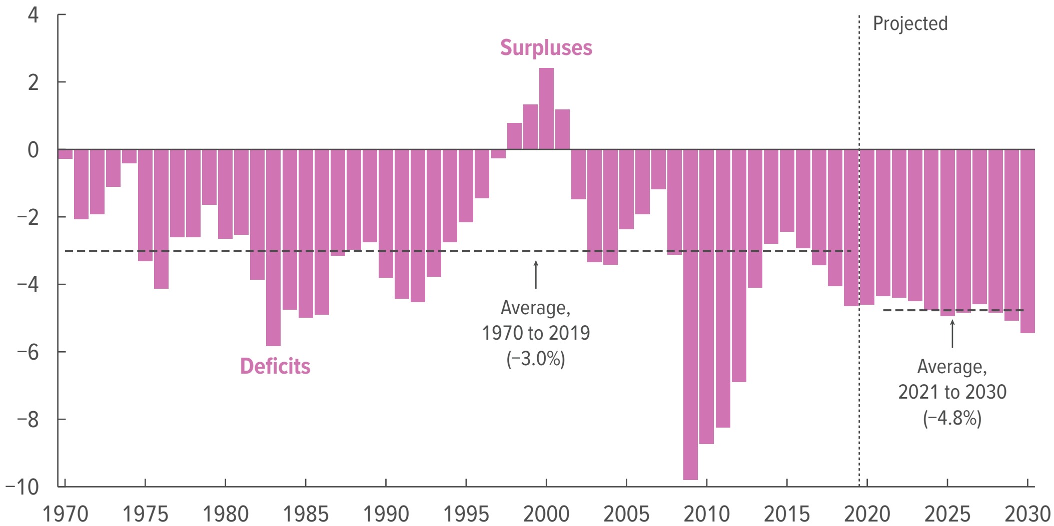
1. See Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2019 to 2029* (August 2019), www.cbo.gov/publication/55551.

2. See Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), www.cbo.gov/publication/55331.

Figure 1-1.

Total Deficits and Surpluses

Percentage of GDP



Deficits as a percentage of GDP are projected to rise from 4.6 percent in 2020 to 5.4 percent in 2030. They exceed their 50-year average throughout that period.

Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

GDP = gross domestic product.

of GDP in 2021 to 18.0 percent of GDP in 2030. The projected growth in revenues after 2025 is mostly attributable to the scheduled expiration of nearly all of the individual income tax provisions of P.L. 115-97, referred to here as the 2017 tax act. Federal outlays are projected to climb from 20.9 percent of GDP in 2021 to 23.4 percent in 2030 (see Figure 1-2).[3]

The average deficit projected over the next 10 years is 1.8 percentage points more than the 3.0 percent of GDP that annual deficits have averaged over the past 50 years. Until recently, deficits tended to be small by historical standards when the economy was relatively strong over a period of several years. For example, between 1969 and 2018, the average deficit totaled 1.5 percent of GDP in years when the unemployment rate was below 6 percent.

3. Because October 1 will fall on a weekend in 2022, 2023, and 2028, certain payments that are due on those days will be made at the end of September instead, thus shifting them into the previous fiscal year. In CBO's projections, those shifts noticeably boost projected outlays and deficits in fiscal years 2022 and 2028 but reduce them in fiscal years 2024 and 2029.

CBO projects that the unemployment rate will remain below 6 percent in each year through 2030. (In CBO's economic forecast, the unemployment rate peaks at 4.6 percent in 2026 and 2027.)

Primary deficits—that is, deficits excluding net outlays for interest—are projected to range between 2.3 percent and 2.9 percent of GDP over the next 10 years, averaging 2.6 percent of GDP from 2021 through 2030. The primary deficit in 2030 is 0.3 percent of GDP larger than the one in 2021. At the same time, mostly because of projected increases in interest rates and federal borrowing, net outlays for interest would grow steadily from 1.7 percent of GDP to 2.6 percent (see Figure 1-3 on page 9). The increase in federal borrowing is the most significant factor affecting the projected growth in those outlays.

The deficits projected in CBO's baseline would boost federal debt held by the public, which consists mostly of the securities that the Treasury issues to raise cash to fund the federal government's activities and pay off its maturing liabilities. The net amount that the Treasury borrows

Table 1-1.

CBO's Baseline Budget Projections, by Category

													Total	
	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2021–2025	2021–2030
							In Billions of Dollars							
Revenues														
Individual income taxes	1,718	1,792	1,905	1,997	2,096	2,179	2,267	2,485	2,710	2,811	2,929	3,049	10,445	24,428
Payroll taxes	1,243	1,302	1,356	1,409	1,464	1,523	1,584	1,642	1,703	1,768	1,832	1,896	7,335	16,177
Corporate income taxes	230	234	257	292	334	362	386	385	382	390	398	406	1,631	3,592
Other	271	304	298	304	312	317	325	339	358	374	386	394	1,556	3,408
Total	**3,462**	**3,632**	**3,816**	**4,001**	**4,206**	**4,382**	**4,562**	**4,851**	**5,154**	**5,343**	**5,545**	**5,745**	**20,967**	**47,605**
On-budget	2,548	2,672	2,815	2,961	3,127	3,263	3,403	3,650	3,909	4,051	4,207	4,359	15,570	35,746
Off-budget[a]	914	960	1,001	1,040	1,079	1,119	1,159	1,201	1,245	1,291	1,338	1,386	5,397	11,859
Outlays														
Mandatory	2,735	2,859	2,979	3,201	3,337	3,469	3,723	3,945	4,139	4,456	4,508	4,878	16,709	38,635
Discretionary	1,336	1,406	1,444	1,492	1,518	1,549	1,594	1,631	1,670	1,714	1,743	1,790	7,597	16,144
Net interest	376	382	394	424	470	515	561	609	658	711	761	819	2,364	5,921
Total	**4,447**	**4,647**	**4,816**	**5,117**	**5,325**	**5,534**	**5,877**	**6,184**	**6,467**	**6,880**	**7,012**	**7,487**	**26,669**	**60,700**
On-budget	3,540	3,687	3,789	4,017	4,147	4,275	4,537	4,766	4,963	5,284	5,318	5,692	20,765	46,787
Off-budget[a]	907	961	1,027	1,100	1,178	1,259	1,340	1,419	1,505	1,597	1,693	1,796	5,904	13,913
Deficit (-) or Surplus	**-984**	**-1,015**	**-1,000**	**-1,116**	**-1,119**	**-1,152**	**-1,315**	**-1,333**	**-1,313**	**-1,538**	**-1,466**	**-1,742**	**-5,702**	**-13,095**
On-budget	-992	-1,015	-974	-1,056	-1,020	-1,012	-1,134	-1,116	-1,054	-1,232	-1,112	-1,333	-5,195	-11,041
Off-budget[a]	8	-1	-26	-60	-100	-140	-181	-218	-260	-305	-355	-410	-507	-2,054
Debt Held by the Public	16,803	17,855	18,886	20,066	21,248	22,453	23,827	25,196	26,545	28,152	29,667	31,447	n.a.	n.a.
Memorandum:														
GDP	21,220	22,111	23,029	23,916	24,809	25,724	26,653	27,615	28,653	29,737	30,850	32,003	124,131	272,989
							As a Percentage of GDP							
Revenues														
Individual income taxes	8.1	8.1	8.3	8.3	8.5	8.5	8.5	9.0	9.5	9.5	9.5	9.5	8.4	8.9
Payroll taxes	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Corporate income taxes	1.1	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Other	1.3	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.3	1.2
Total	**16.3**	**16.4**	**16.6**	**16.7**	**17.0**	**17.0**	**17.1**	**17.6**	**18.0**	**18.0**	**18.0**	**18.0**	**16.9**	**17.4**
On-budget	12.0	12.1	12.2	12.4	12.6	12.7	12.8	13.2	13.6	13.6	13.6	13.6	12.5	13.1
Off-budget[a]	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Outlays														
Mandatory	12.9	12.9	12.9	13.4	13.4	13.5	14.0	14.3	14.4	15.0	14.6	15.2	13.5	14.2
Discretionary	6.3	6.4	6.3	6.2	6.1	6.0	6.0	5.9	5.8	5.8	5.6	5.6	6.1	5.9
Net interest	1.8	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	1.9	2.2
Total	**21.0**	**21.0**	**20.9**	**21.4**	**21.5**	**21.5**	**22.1**	**22.4**	**22.6**	**23.1**	**22.7**	**23.4**	**21.5**	**22.2**
On-budget	16.7	16.7	16.5	16.8	16.7	16.6	17.0	17.3	17.3	17.8	17.2	17.8	16.7	17.1
Off-budget[a]	4.3	4.3	4.5	4.6	4.7	4.9	5.0	5.1	5.3	5.4	5.5	5.6	4.8	5.1
Deficit (-) or Surplus	**-4.6**	**-4.6**	**-4.3**	**-4.7**	**-4.5**	**-4.5**	**-4.9**	**-4.8**	**-4.6**	**-5.2**	**-4.8**	**-5.4**	**-4.6**	**-4.8**
On-budget	-4.7	-4.6	-4.2	-4.4	-4.1	-3.9	-4.3	-4.0	-3.7	-4.1	-3.6	-4.2	-4.2	-4.0
Off-budget[a]	*	*	-0.1	-0.3	-0.4	-0.5	-0.7	-0.8	-0.9	-1.0	-1.2	-1.3	-0.4	-0.8
Debt Held by the Public	79.2	80.8	82.0	83.9	85.6	87.3	89.4	91.2	92.6	94.7	96.2	98.3	n.a.	n.a.

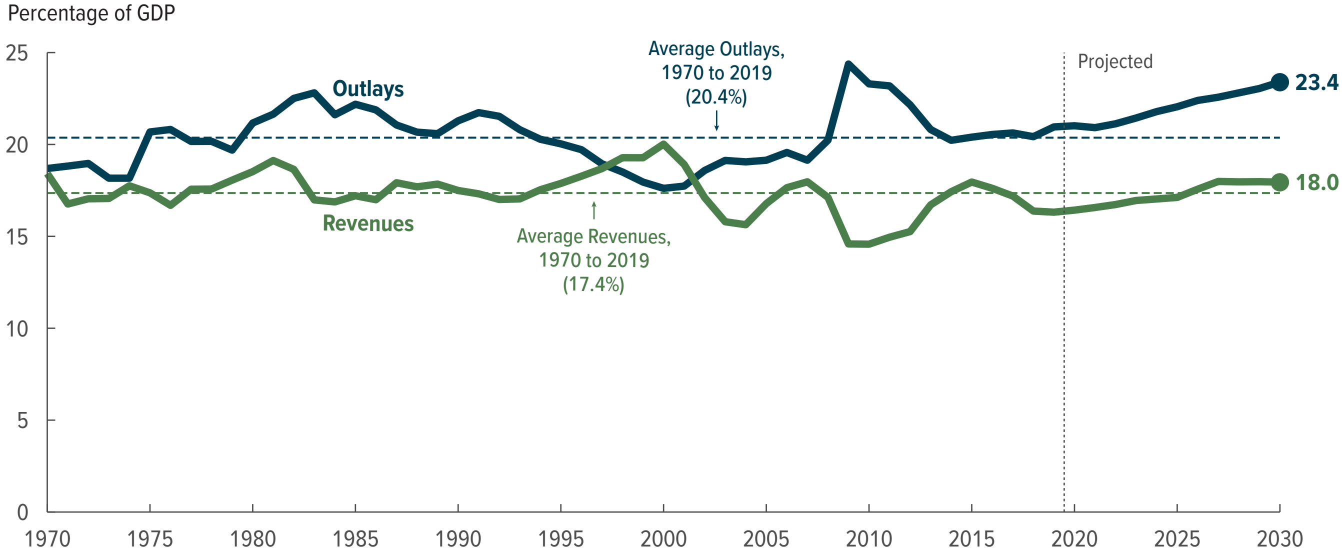
Source: Congressional Budget Office.

GDP = gross domestic product; n.a. = not applicable; * = between -0.05 percent and 0.05 percent.

a. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

Figure 1-2.

Total Revenues and Outlays



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

GDP = gross domestic product.

by issuing those securities (calculated as the amounts that are sold minus the amounts that have matured) is influenced primarily by the annual budget deficit.

In CBO's baseline, after accounting for all of the government's borrowing needs, debt held by the public rises from $17.9 trillion at the end of 2020 to $31.4 trillion at the end of 2030 (see Table 1-2). As a percentage of GDP, that debt would increase from 81 percent at the end of 2020 to 98 percent by the end of the projection period. At that point, such debt would be the largest since 1946 and more than twice the average over the past 50 years.

Long-Term Projections

Beyond 2030, debt held by the public is projected to increase substantially (see Figure 1-4 on page 11). By 2050, it would equal 180 percent of GDP, CBO projects, nearly 75 percentage points higher than it was in 1946, when federal debt reached its peak. (See Box 1-1 on page 12 for more details on CBO's long-term budget projections.)

Consequences of Rising Federal Debt

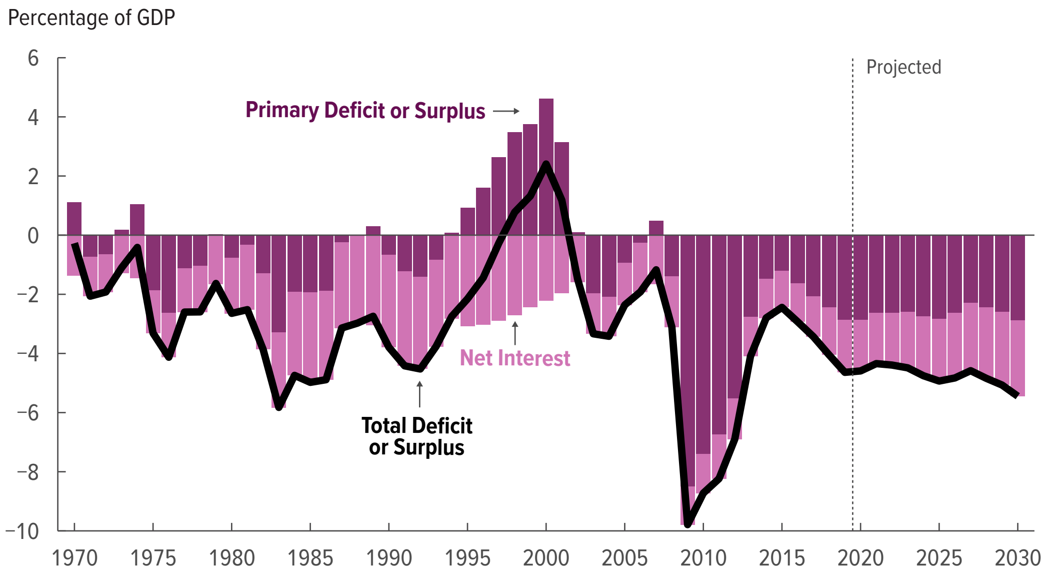
If federal debt as a percentage of GDP continued to rise at the pace that CBO projects it would under current law, the economy would be affected in two significant ways:

- That growing debt would dampen economic output over time, and
- Rising interest costs associated with that debt would increase interest payments to foreign debt holders and thus reduce the income of U.S. households by increasing amounts.

The increases in debt that CBO projects would also pose significant risks to the fiscal and economic outlook, although those risks are not currently apparent in financial markets. In addition, high debt might cause policymakers to feel constrained from implementing deficit-financed fiscal policy to respond to unforeseen events or for other purposes, such as to promote economic activity or strengthen national defense. Negative

Figure 1-3.

Total Deficit, Primary Deficit, and Net Interest



In CBO's projections, primary deficits fluctuate between 2.3 percent and 2.9 percent of GDP over the next decade, but total deficits grow because of rising interest costs.

Source: Congressional Budget Office.

Primary deficits or surpluses exclude net outlays for interest.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

GDP = gross domestic product.

economic and financial effects that were less abrupt but still significant—such as expectations of higher inflation or an increased burden of financing public and private activity—would also have a greater chance of occurring. Those effects would worsen the consequences associated with high and rising federal debt.

To put debt on a sustainable path, lawmakers will have to make significant changes to tax and spending policies—increasing revenues more than they would under current law, reducing spending below projected amounts, or adopting some combination of those approaches.

Uncertainty in Projections of Deficits and Debt

Future deficits and debt are likely to differ from CBO's current-law projections for a number of reasons. Changes to laws and administrative actions—particularly those affecting fiscal policies—that cause them to differ from the laws and policies underlying CBO's baseline projections could lead to budgetary outcomes that diverge considerably from those in the baseline.

Even if federal laws remained the same over the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in other factors that affect federal spending and revenues. CBO's projections of outlays and revenues, and therefore of deficits and debt, depend in part on the agency's economic projections for the coming decade, which include forecasts for such variables as interest rates, inflation, and growth in productivity. Discrepancies between those forecasts and actual economic outcomes—for example, because of a crisis in the financial sector—can cause significant differences between baseline budget projections and budgetary outcomes. Differences might also be caused by unanticipated developments that affect other aspects of CBO's projections, such as new trends in spending on health care, or changes in the claiming of tax credits or participation in benefit programs. CBO aims for its projections to be in the middle of the distribution of possible outcomes, given the baseline assumptions about federal tax and spending policies, and recognizes that actual outcomes will typically differ to some degree from any such projections.

Table 1-2.

CBO's Baseline Projections of Federal Debt

Billions of Dollars

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Debt Held by the Public at the Beginning of the Year	15,750	16,803	17,855	18,886	20,066	21,248	22,453	23,827	25,196	26,545	28,152	29,667
Changes in Debt Held by the Public												
Deficit	984	1,015	1,000	1,116	1,119	1,152	1,315	1,333	1,313	1,538	1,466	1,742
Other means of financing[a]	69	37	30	64	63	53	60	35	36	69	49	38
Total	1,053	1,052	1,031	1,180	1,182	1,205	1,375	1,369	1,349	1,606	1,516	1,780
Debt Held by the Public at the End of the Year												
In billions of dollars	**16,803**	**17,855**	**18,886**	**20,066**	**21,248**	**22,453**	**23,827**	**25,196**	**26,545**	**28,152**	**29,667**	**31,447**
As a percentage of GDP	**79.2**	**80.8**	**82.0**	**83.9**	**85.6**	**87.3**	**89.4**	**91.2**	**92.6**	**94.7**	**96.2**	**98.3**
Memorandum:												
Debt Held by the Public Minus Financial Assets[b]												
In billions of dollars	14,961	15,976	16,976	18,092	19,211	20,363	21,678	23,011	24,325	25,862	27,328	29,071
As a percentage of GDP	70.5	72.3	73.7	75.6	77.4	79.2	81.3	83.3	84.9	87.0	88.6	90.8
Gross Federal Debt[c]	22,668	23,790	24,901	26,112	27,295	28,476	29,790	31,109	32,252	33,583	34,805	36,204
Debt Subject to Limit[d]	22,687	23,810	24,921	26,132	27,317	28,498	29,813	31,133	32,276	33,609	34,831	36,231
Average Interest Rate on Debt Held by the Public (Percent)	2.5	2.4	2.3	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.8

Source: Congressional Budget Office.

GDP = gross domestic product.

a. Factors not included in budget totals that affect the government's need to borrow from the public. Those factors include cash flows associated with federal credit programs such as student loans (because only the subsidy costs of those programs are reflected in the budget deficit), as well as changes in the government's cash balances.

b. Debt held by the public minus the value of outstanding student loans and other credit transactions, cash balances, and various financial instruments.

c. Federal debt held by the public plus Treasury securities held by federal trust funds and other government accounts.

d. The amount of federal debt that is subject to the overall limit set in law. That measure of debt excludes debt issued by the Federal Financing Bank and reflects certain other adjustments that are excluded from gross federal debt. The debt limit was most recently set at $22.0 trillion but has been suspended through July 31, 2021. On August 1, 2021, the debt limit will be raised to its previous level plus the amount of federal borrowing that occurred while the limit was suspended. For more details, see Congressional Budget Office, *Federal Debt and the Statutory Limit, February 2019* (February 2019), www.cbo.gov/publication/54987.

Historical experience gives some indication of the magnitude of the uncertainty of budget projections.[4] On the basis of an analysis of its past projections, CBO estimates that there is approximately a two-thirds chance that, under current law, the deficit in 2021 would be between 3.3 percent and 5.4 percent of GDP. The range in 2025 would be larger: CBO estimates that, under current law, there is approximately a two-thirds chance that the deficit would be between 3.1 percent and 6.8 percent of GDP in that year (see Figure 1-5 on page 14).

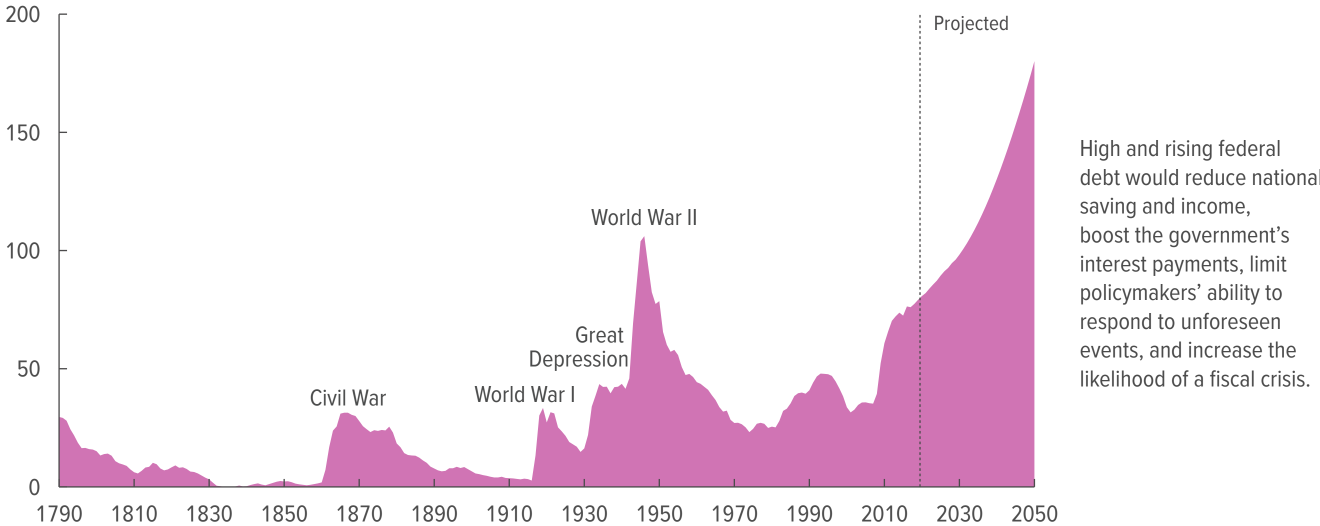
Errors in the projections of debt tend to compound over time, so the uncertainty surrounding those projections

4. See Congressional Budget Office, *An Evaluation of CBO's Past Deficit and Debt Projections* (September 2019), www.cbo.gov/publication/55234.

Figure 1-4.

Federal Debt Held by the Public

Percentage of GDP



Source: Congressional Budget Office.

GDP = gross domestic product.

is greater. For example, in CBO's baseline, federal debt held by the public is projected to equal 89 percent of GDP in 2025. Taking into account the errors in its past projections, CBO estimates that there is approximately a two-thirds chance that, under current law, federal debt would be between 80 percent and 98 percent of GDP in that year.

Outlays

Federal outlays in CBO's baseline are projected to rise from $4.6 trillion in 2020 to $7.5 trillion in 2030. Increases in mandatory spending—particularly for Social Security and Medicare—account for nearly three-quarters of that increase.

Total Outlays in 2020

In CBO's projections, total federal outlays in 2020 increase by $201 billion (or 5 percent) from their 2019 amounts. Most of that increase is attributable to mandatory outlays, which are anticipated to rise by $125 billion (or 5 percent). Discretionary outlays also are expected to increase by 5 percent this year, to a total of $1.4 trillion, an increase of $69 billion. The government's net interest costs in 2020 are expected to inch up by $7 billion (or 2 percent), to $382 billion. (See Box 1-2 on page 15 for descriptions of the three major types of federal outlays.)

Federal outlays in 2020 are projected to be 21.0 percent of GDP, 0.6 percentage points above their average of 20.4 percent over the 1970–2019 period. Mandatory spending (net of the offsetting receipts that are credited against such outlays) is expected to equal 12.9 percent of GDP in 2020, compared with an average of 10.1 percent over the past 50 years. As a share of GDP, the other major components of federal spending are projected to fall below their 50-year averages: Discretionary outlays are expected to equal 6.4 percent of GDP this year, compared with their average of 8.3 percent over the past 50 years, and net outlays for interest are expected to equal 1.7 percent of GDP, compared with their 50-year average of 2.0 percent.

Total Outlays in 2030

Over the coming decade, CBO projects, federal outlays would grow at an average annual rate of 4.9 percent. Outlays for Social Security, Medicare, and net interest account for a little more than two-thirds of

Box 1-1.

The Budget Outlook for the Next 30 Years

Beyond the coming decade, the fiscal outlook is daunting. In the Congressional Budget Office's projections, growing budget deficits boost federal debt dramatically over the next three decades (see the table). By 2050, debt is projected to reach 180 percent of gross domestic product (GDP), far higher than any percentage previously recorded in the United States and on track to grow even larger. Relative to GDP, CBO projects, federal debt would be higher and deficits larger over the next three decades than the agency projected in June 2019, when it last updated its long-term budget projections.

Those long-term projections follow CBO's 10-year baseline projections for the coming decade and then extend the baseline concept for subsequent years.[1] The paths of the economic and demographic variables used to construct CBO's projections are uncertain. But even if their values differed from those underlying the extended baseline projections, federal debt would probably be much higher in 30 years than it is today, if current laws generally remained unchanged.

Projected Spending and Revenues Through 2050

Federal revenues would rise relative to GDP under current law, increasing from 16.3 percent of GDP in 2019 to 18.6 percent in 2050. However, spending would increase even more, rising from 21.0 percent of GDP in 2019 to 30.4 percent in 2050—driven by increases of 4.8 percentage points in mandatory spending and 5.4 percentage points in net outlays for interest. Increases in mandatory spending would result from the aging of the population and growth in per capita spending on health care. Higher interest costs would stem from increases in federal borrowing and rising interest rates. In contrast, discretionary spending is projected to decline by 0.8 percentage points as a share of GDP. All told, the budget deficit in 2050 would be close to 12 percent of GDP, almost four times what it has averaged over the past 50 years.

Changes in CBO's 30-Year Projections

In CBO's extended baseline projections, debt in 2049 is equal to 174 percent of GDP, which is 30 percentage points higher than the level the agency projected in June.[2] Three factors account for that upward revision. First, revenues as a share of GDP are projected to be lower, primarily as a result of legislation enacted in December 2019. Second, CBO has increased its projections of spending, largely as a result of legislation enacted in August. Third, CBO has lowered its projections of GDP growth.

Changes in Revenues. The long-term projections for revenues are lower than they were last June, primarily because the tax on employment-based health insurance plans with high premiums was repealed. Other factors, including slower projected economic growth and other legislative changes, also reduced long-term revenue projections. As a share of GDP, revenues in 2049 are now projected to total 18.5 percent, which is 1.0 percentage point lower than CBO projected last June.

Changes in Spending. Projections of spending over the next three decades are higher than those reported last June, primarily because of the higher limits on discretionary funding in 2020 and 2021 put in place by the Bipartisan Budget Act of 2019. (Those higher limits were reflected in the 10-year baseline budget projections that CBO released last August.) The projected path of discretionary spending in the extended baseline is extrapolated from that higher level. Meanwhile, net outlays for interest are initially lower and then higher than CBO previously projected. That pattern results from a downward revision to interest rates in the first decade that is attenuated over the next two decades as greater federal borrowing is projected to put upward pressure on interest rates. Overall, projected spending in 2049 totals 30.0 percent of GDP, 1.7 percentage points higher than in the agency's June projections.

Changes in Economic Growth. In CBO's current projections, real (inflation-adjusted) GDP grows at a rate of 1.7 percent per year over the next 10 years, slightly slower than in the agency's June 2019 projections. Over the subsequent two decades, the rate of growth, at 1.6 percent, is also slower than it was projected to be in June—in part because of slower growth in the agency's projections of capital services resulting from higher projected deficits in the long term. In addition, CBO now accounts for how changes in long-term population growth and household formation reduce private residential investment. Slightly slower population growth also contributes to the slower growth of GDP.

1. The analysis reflects statutory requirements that CBO's baseline projections incorporate the assumptions that current law generally remains unchanged, that some mandatory programs are nevertheless extended after their authorizations lapse, and that spending for Medicare and Social Security continues as scheduled even if their trust funds are exhausted.

2. For years after 2030, CBO has updated its long-term population, economic, and revenue projections and has updated spending projections using a simplified approach. CBO expects to publish fully updated long-term projections in the spring of 2020. For the most recent detailed description, see Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), www.cbo.gov/publication/55331.

Continued

Box 1-1. Continued

The Budget Outlook for the Next 30 Years

Key Projections in CBO's Extended Baseline

Percentage of GDP

	2020	2021	Projected Annual Average 2022–2025	2026–2030	2031–2040	2041–2050
Revenues						
Individual income taxes	8.1	8.3	8.4	9.4	9.7	10.1
Payroll taxes	5.9	5.9	5.9	5.9	5.9	5.8
Corporate income taxes	1.1	1.1	1.4	1.3	1.2	1.2
Other	1.4	1.3	1.2	1.2	1.2	1.3
Total Revenues	**16.4**	**16.6**	**17.0**	**17.9**	**18.1**	**18.4**
Outlays						
Mandatory						
Social Security	4.9	5.0	5.3	5.8	6.3	6.4
Major health care programs[a]	5.4	5.4	5.8	6.6	7.8	9.0
Other	2.6	2.5	2.4	2.3	2.1	2.0
Subtotal	12.9	12.9	13.6	14.7	16.2	17.3
Discretionary	6.4	6.3	6.1	5.7	5.5	5.5
Net interest	1.7	1.7	1.9	2.4	3.4	5.8
Total Outlays	**21.0**	**20.9**	**21.6**	**22.9**	**25.1**	**28.6**
Deficit	**-4.6**	**-4.3**	**-4.7**	**-5.0**	**-7.0**	**-10.2**
Debt Held by the Public at the End of the Period	**81**	**82**	**89**	**98**	**130**	**180**
Memorandum:						
Social Security						
Revenues[b]	4.5	4.5	4.6	4.6	4.6	4.5
Outlays[c]	4.9	5.0	5.3	5.8	6.3	6.4
Contribution to the Federal Deficit[d]	-0.4	-0.5	-0.8	-1.2	-1.7	-1.9
Medicare						
Revenues[b]	1.4	1.5	1.5	1.5	1.6	1.6
Outlays[c]	3.8	3.9	4.3	5.0	6.1	7.2
Offsetting receipts	-0.6	-0.7	-0.7	-0.9	-1.1	-1.4
Contribution to the Federal Deficit[d]	-1.7	-1.8	-2.0	-2.6	-3.4	-4.3
GDP at the End of the Period (Trillions of dollars)	22.1	23.0	26.7	32.0	45.6	64.8

Source: Congressional Budget Office.

This table satisfies a requirement specified in section 3111 of S. Con. Res. 11, the Concurrent Resolution on the Budget for Fiscal Year 2016.

Additional information about these long-term projections is included in the supplemental data that accompany this report. Those data are available online at www.cbo.gov/publication/56020.

GDP = gross domestic product.

a. Consists of outlays for Medicare (net of premiums and other offsetting receipts), Medicaid, the Children's Health Insurance Program, subsidies for health insurance purchased through the marketplaces established under the Affordable Care Act, and related spending.

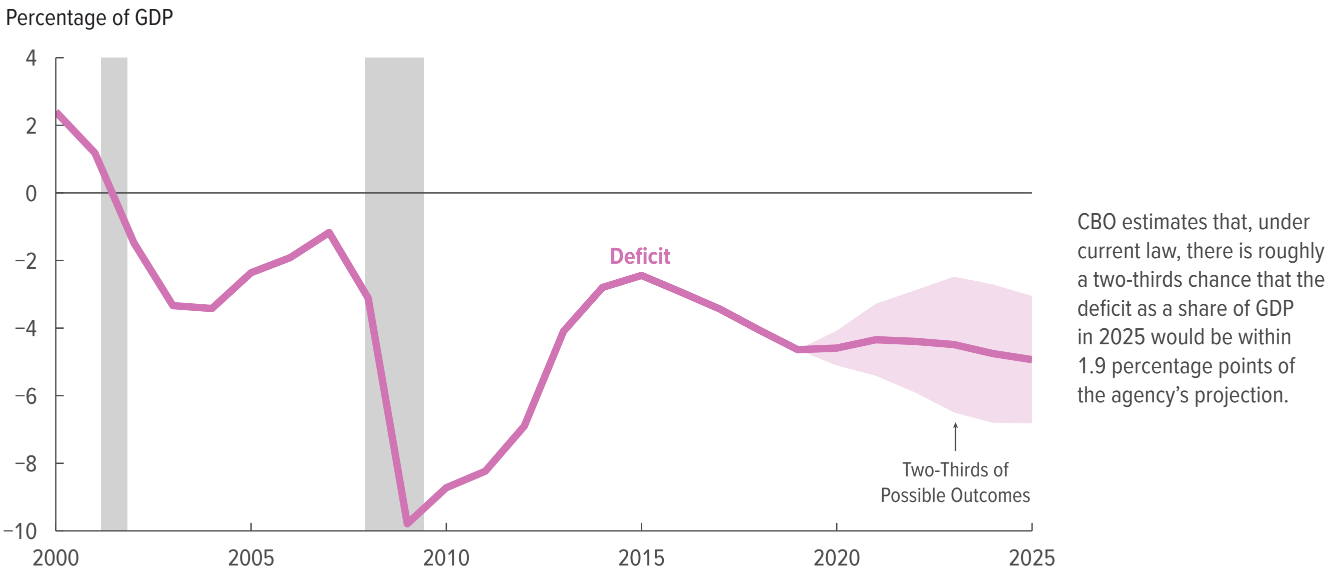
b. Includes payroll taxes other than those paid by the federal government on behalf of its employees; those payments are intragovernmental transactions. Also includes income taxes paid on Social Security benefits, which are credited to the trust funds.

c. Does not include outlays related to the administration of the program, which are discretionary. For Social Security, outlays do not include intragovernmental offsetting receipts stemming from the employer's share of payroll taxes paid to the Social Security trust funds by federal agencies on behalf of their employees.

d. The net increase in the deficit shown in this table differs from the change in the trust fund balance for the associated program. It does not include intragovernmental transactions, interest earned on balances, or outlays related to the administration of the program.

Figure 1-5.

The Uncertainty of CBO's Baseline Projections of the Budget Deficit



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. All projections presented here have been adjusted to exclude the effects of those timing shifts. Historical amounts have been adjusted as far back as the available data will allow.

The shaded area around CBO's baseline deficit projection, which encompasses two-thirds of possible outcomes, is based on the errors in CBO's one-, two-, three-, four-, five-, and six-year projections of the deficit for fiscal years 1984 through 2018.

Actual outcomes will be affected by legislation enacted in future years. The effects of future legislation are not reflected in this figure.

GDP = gross domestic product.

the $2.8 trillion increase in outlays over the projection period.

As a result of that growth, federal outlays in 2030 are projected to exceed their 50-year average by 3.0 percentage points, totaling 23.4 percent of GDP (see Figure 1-6). Specifically, in 2030:

- Mandatory spending, which is projected to reach 15.2 percent of GDP, would exceed its 50-year average by 5.2 percentage points.
- Net interest outlays are projected to total 2.6 percent of GDP, exceeding their historical average by 0.5 percentage points of GDP.
- In contrast, discretionary outlays are projected to decline to 5.6 percent of GDP, 2.7 percentage points below their average over the previous 50 years and lower than at any point during that period. (Under the rules that govern the construction of CBO's baseline, discretionary spending after 2021 is projected to keep pace with future inflation, but GDP is projected to grow faster.)

Mandatory Spending

Mandatory, or direct, spending includes outlays for most federal benefit programs and for certain other payments to people, businesses, nonprofit institutions, and state and local governments. Such spending is generally governed by statutory criteria and is not normally constrained by the annual appropriation process.[5] Certain

5. Each year, some mandatory programs are modified by provisions in annual appropriation acts. Such changes may increase or decrease spending for the affected programs for one or more years. In addition, some programs, such as Medicaid, the Supplemental Nutrition Assistance Program, and benefits for Coast Guard retirees and annuitants, are considered mandatory but require benefits to be paid from amounts provided in appropriation acts. Section 257 of the Deficit Control Act requires CBO to project outlays for those programs as if they were fully funded, regardless of the amounts actually appropriated.

Box 1-2.

Categories of Federal Outlays

Outlays are the issuance of checks, disbursement of cash, or electronic transfer of funds made to liquidate a federal obligation. (The authority provided by federal law to incur such obligations is known as budget authority and is sometimes referred to as funding.) On the basis of their treatment in the budget process, federal outlays can be divided into three broad categories: mandatory, discretionary, and net interest.

Mandatory outlays consist primarily of payments for benefit programs, such as Social Security, Medicare, and Medicaid. The Congress largely determines funding for those programs by setting rules for eligibility, benefit formulas, and other parameters rather than by appropriating specific amounts each year. In making baseline projections, the Congressional Budget Office generally assumes that the existing laws and policies governing those programs will remain unchanged. Mandatory outlays are net of offsetting receipts—fees and other charges that are recorded as negative budget authority and outlays. Offsetting receipts differ from revenues: Revenues are collected through the government's sovereign powers (in the form of income taxes, for example), whereas offsetting receipts are mostly collected from other government accounts or from members of the public for businesslike transactions (in the form of premiums for Medicare or royalties for the drilling of oil on public lands, for example).

Discretionary outlays result from the funding controlled by annual appropriation acts in which policymakers specify how much money can be obligated for certain government programs in specific years. Appropriations fund a broad array of government activities, including defense, law enforcement, education, and veterans' health programs. They also fund the national park system, disaster relief, and foreign aid. Some of the fees and charges triggered by appropriation acts are classified as offsetting collections and are credited against discretionary budget authority and outlays for the particular accounts affected. In any year, some discretionary outlays arise from budget authority provided in the same year, and some arise from appropriations made in previous years.

In addition to outlays for the activities described above, CBO's baseline projections include discretionary outlays for highway and airport infrastructure programs and public transit programs, all of which receive mandatory budget authority from authorizing legislation. Typically, outlays of mandatory budget authority are also classified as mandatory. Each year, however, appropriation acts control outlays for those transportation programs by limiting how much of the mandatory budget authority the Department of Transportation can obligate. For that reason, those obligation limitations are often treated as a measure of discretionary budgetary resources, and the resulting outlays are considered discretionary.[1] They serve to constrain outlays only during periods when they are in effect.

Net interest consists of interest paid on Treasury securities and other interest that the government pays (for example, interest paid on late refunds issued by the Internal Revenue Service) minus the interest that it collects from various sources (for example, from states that pay interest on advances they received from the federal Unemployment Trust Fund when the balances of their state unemployment accounts were insufficient to pay benefits promptly). Net interest is determined mostly by the size and composition of the government's debt and by market interest rates.

1. Discretionary budgetary resources include new budget authority, unobligated balances of budget authority provided in previous years, and obligation limitations.

types of payments that federal agencies receive from the public and from other government agencies are classified as offsetting receipts and are accounted for in the budget as reductions in mandatory spending.

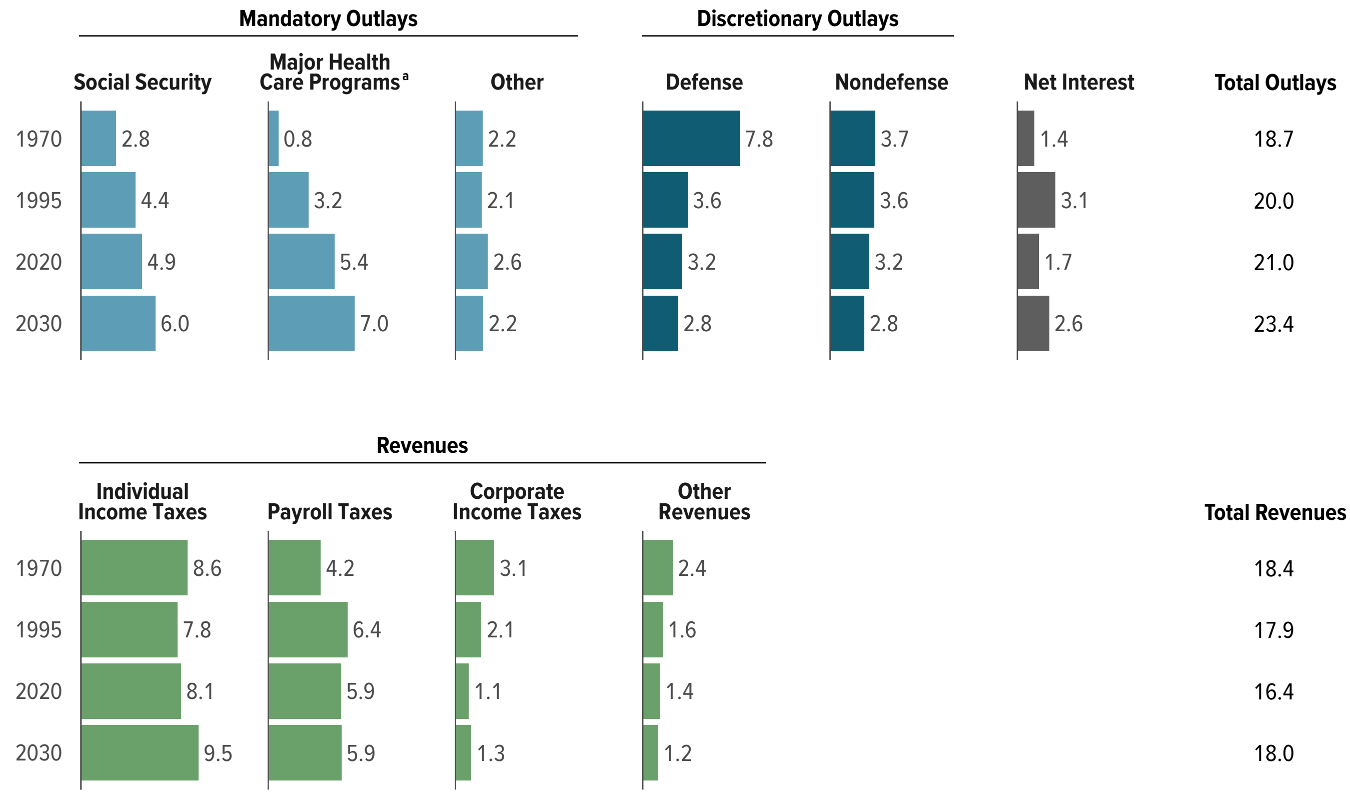
The Deficit Control Act requires CBO to construct baseline projections of most mandatory spending under the assumption that current laws continue unchanged. Therefore, CBO's baseline projections of mandatory spending reflect the estimated effects of economic influences, growth in the number of beneficiaries participating in certain mandatory programs, and other factors related to the costs of those programs, even those programs that are set to expire under current law.[6] The

6. Section 257 of the Deficit Control Act also requires CBO to assume that certain mandatory programs will continue beyond their scheduled expiration and that entitlement programs, including Social Security and Medicare, will be fully funded and thus able to make all scheduled payments even if the trust funds associated with those programs do not contain the funding to make full payments. Other rules that govern the construction of CBO's baseline have been developed by the agency in consultation with the House and Senate Committees on the Budget. For further details, see Congressional Budget Office, *How CBO Prepares Baseline Budget Projections* (February 2018), www.cbo.gov/publication/53532.

Figure 1-6.

CBO's Baseline Projections of Outlays and Revenues, Compared With Actual Values 25 and 50 Years Ago

Percentage of GDP



Source: Congressional Budget Office.

When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year. That happened in 1994 and 1995, so values for 1995 have been adjusted to exclude the effects of those timing shifts.

GDP = gross domestic product.

a. Consists of outlays for Medicare (net of premiums and other offsetting receipts), Medicaid, the Children's Health Insurance Program, premium tax credits, and related spending.

projections also incorporate a set of across-the-board reductions in budgetary resources (known as sequestration) that are required under current law for some mandatory programs.

Outlays for mandatory programs (net of offsetting receipts), which totaled $2.7 trillion in 2019, are projected to rise to $4.9 trillion by the end of the projection period (see Table 1-3). Overall, mandatory outlays are projected to increase at an average annual rate of 5.4 percent between 2019 and 2030.

Much of the projected growth in mandatory spending as a percentage of GDP over the coming decade is attributable to two factors: an increasing number of participants in Social Security and Medicare, and growth in federal health care costs per beneficiary. The number of participants is growing rapidly because the United States is an aging society. The number of people age 65 or older is now more than twice what it was 50 years ago, and that number is expected to rise by about one-third by 2030. When the percentage increase in the number of participants is greater than in the population and costs per beneficiary grow faster than GDP per capita, then spending as a percentage of GDP increases. In CBO's projections for Medicare and Medicaid, per-enrollee spending grows faster than GDP per person, averaging 5.3 percent per year between 2019 and 2030. Projected increases in the volume and intensity of health care utilization contribute to that faster growth. Taking into account the range of experience over the past three decades, CBO's projections of per-enrollee spending growth are higher than the growth over the past decade and lower than that over the two decades preceding that period.

The effects of those two long-term trends on federal spending are already apparent over the 10-year projection period—especially for Social Security and Medicare—and are expected to persist beyond that period.

Social Security and the Major Health Care Programs. Outlays for Social Security and the major health care programs—Medicare, Medicaid, premium tax credits and related spending, and the Children's Health Insurance Program—account for more than 90 percent of the projected growth in mandatory spending through 2030.[7] Under current law, spending for those programs, net of offsetting receipts, would grow at an average annual rate of 6.1 percent over the coming decade, CBO estimates, increasing from 10.2 percent of GDP in 2019 to 13.0 percent in 2030.[8]

Specifically, in CBO's current baseline:

- Outlays for Social Security, which totaled 4.9 percent of GDP in 2019, rise steadily thereafter, reaching 6.0 percent of GDP in 2030 (see Figure 1-7 on page 20).

- Outlays for Medicare, which totaled 3.0 percent of GDP in 2019, grow in most years through 2030, when they total 4.4 percent.

- Federal outlays for Medicaid remain relatively stable as a percentage of GDP over the coming decade, averaging about 2 percent each year.

- Outlays for premium tax credits and related spending average 0.2 percent of GDP per year through 2030.

Other Mandatory Programs. Aside from spending on Social Security and the major health care programs, all other mandatory spending, which totaled 2.7 percent of GDP in 2019, is projected to decline as a share of GDP, to 2.2 percent in 2030. That category includes spending on income support programs (such as unemployment compensation and the Supplemental Nutrition Assistance Program), military and civilian retirement programs, most veterans' benefits, and major agriculture programs. The projected decline in spending relative to GDP occurs in part because benefit amounts for many of those programs increase each year to keep pace with inflation, and in CBO's economic forecast, the rate of inflation is less than the rate of growth in nominal GDP. (For more details about CBO's economic forecast, see Chapter 2.)

Discretionary Spending

Discretionary spending encompasses an array of federal activities that are funded through or controlled by annual appropriations. That category includes most defense spending as well as spending for many nondefense activities, such as elementary and secondary education, housing assistance, international affairs, and the administration of justice, along with outlays for highway programs. In any year, some discretionary outlays arise from budget authority provided in the same year, and some from appropriations made in previous years.[9]

The Bipartisan Budget Act of 2019 (P.L. 116-37) revised the limits (or caps) that had previously been set on discretionary appropriations for 2020 and 2021.[10] CBO's projections of discretionary funding incorporate

7. Premium tax credits are federal subsidies for health insurance purchased through the marketplaces established by the Affordable Care Act. Related spending consists almost entirely of payments for risk adjustment and the Basic Health Program, an optional state program that covers low-income residents outside of the health insurance marketplaces.

8. Offsetting receipts primarily include payments of premiums, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

9. Budget authority is the funding provided by federal laws to incur financial obligations that will result in immediate or future outlays of federal government funds. Outlays are the amount of money spent each year.

10. Most discretionary funding is limited by caps on annual discretionary appropriations that were originally specified in the Budget Control Act of 2011 (P.L. 112-25) and modified by subsequent legislation. See Congressional Budget Office, cost estimate for the Bipartisan Budget Act of 2019 (July 23, 2019), www.cbo.gov/publication/55478. Under current law, separate caps exist for defense and nondefense funding through 2021. If the total amount of discretionary funding provided in appropriation acts for a given year exceeds the cap for either category, the President must sequester—or cancel—a sufficient amount of budgetary resources (following procedures specified in the Budget Control Act) to eliminate the breach.

Table 1-3.

Mandatory Outlays Projected in CBO's Baseline

Billions of Dollars

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total 2021–2025	Total 2021–2030
Social Security														
Old-Age and Survivors Insurance	893	949	1,009	1,075	1,145	1,217	1,292	1,368	1,448	1,536	1,623	1,713	5,739	13,428
Disability Insurance	145	145	149	155	162	169	176	184	193	198	205	213	810	1,804
Subtotal	1,038	1,094	1,158	1,230	1,307	1,386	1,468	1,553	1,642	1,734	1,828	1,926	6,549	15,232
Major Health Care Programs														
Medicare[a]	775	835	896	1,004	1,043	1,073	1,201	1,287	1,379	1,542	1,518	1,722	5,217	12,665
Medicaid	409	425	444	466	494	523	555	587	620	655	692	732	2,481	5,768
Premium tax credits and related spending[b]	56	52	52	53	56	58	61	63	64	65	68	71	279	610
Children's Health Insurance Program	18	16	14	14	15	16	16	17	18	18	19	20	75	166
Subtotal[a]	1,258	1,327	1,405	1,538	1,607	1,670	1,832	1,954	2,080	2,281	2,297	2,545	8,052	19,209
Income Security Programs														
Earned income, child, and other tax credits[c]	99	96	94	93	94	95	95	96	83	83	83	83	471	898
Supplemental Nutrition Assistance Program	63	63	61	61	62	63	64	64	65	67	68	70	311	644
Supplemental Security Income	56	57	57	64	61	58	65	67	69	77	68	76	305	663
Unemployment compensation	28	28	30	34	43	47	48	50	52	54	56	57	201	470
Family support and foster care[d]	32	33	33	33	33	33	34	34	34	34	35	35	166	338
Child nutrition	24	25	26	27	28	29	30	32	33	34	36	38	140	312
Subtotal	303	301	301	312	320	325	336	344	336	349	345	359	1,593	3,326
Federal Civilian and Military Retirement														
Civilian[e]	106	109	113	117	121	125	129	133	137	141	144	148	606	1,309
Military	61	62	64	71	69	65	72	74	76	84	74	82	341	730
Other	3	3	3	4	4	4	1	10	6	5	6	6	16	49
Subtotal	170	173	181	192	194	195	202	216	219	230	224	236	963	2,088
Veterans' Programs														
Income security[f]	101	107	113	126	122	117	131	136	140	156	137	154	610	1,332
Other	14	17	17	17	17	16	18	18	19	20	19	21	85	182
Subtotal	115	124	130	144	139	133	149	154	159	177	156	175	695	1,515
Other Programs														
Agriculture	32	28	16	17	18	17	17	17	17	17	16	16	86	169
Deposit insurance	-8	-7	-6	-6	-6	-5	-6	-6	-7	-7	-7	-8	-29	-65
MERHCF	10	11	11	12	13	13	14	14	15	16	17	18	63	143
Fannie Mae and Freddie Mac[g]	0	0	1	4	3	3	4	4	4	4	4	5	15	36
Higher education	33	2	4	5	5	5	5	5	5	5	5	5	24	49
Other	57	80	73	72	69	69	71	70	70	70	71	71	353	706
Subtotal	125	114	99	103	102	103	105	105	104	106	106	107	512	1,039

Continued

Table 1-3. Continued

Mandatory Outlays Projected in CBO's Baseline

	Actual, 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total 2021–2025	Total 2021–2030
Mandatory Outlays, Excluding the Effects of Offsetting Receipts	**3,010**	**3,134**	**3,273**	**3,519**	**3,669**	**3,811**	**4,093**	**4,325**	**4,540**	**4,876**	**4,956**	**5,348**	**18,364**	**42,409**
Offsetting Receipts														
Medicare[h]	-131	-140	-155	-168	-181	-196	-211	-227	-245	-264	-286	-308	-910	-2,239
Federal share of federal employees' retirement														
Civil service retirement and other	-36	-39	-40	-41	-43	-45	-46	-48	-50	-51	-53	-54	-216	-471
Military retirement	-21	-22	-25	-26	-26	-27	-28	-28	-29	-30	-30	-31	-132	-280
Social Security	-18	-18	-19	-20	-20	-21	-22	-22	-23	-24	-25	-25	-102	-221
Subtotal	-75	-79	-84	-87	-90	-93	-96	-99	-102	-105	-108	-111	-450	-973
Receipts related to natural resources	-14	-13	-12	-13	-12	-12	-12	-12	-13	-12	-13	-14	-62	-127
MERHCF	-8	-8	-9	-9	-10	-10	-11	-11	-12	-12	-13	-13	-48	-109
Fannie Mae and Freddie Mac[g]	-19	-4	0	0	0	0	0	0	0	0	0	0	0	0
Other	-28	-30	-35	-40	-40	-31	-40	-31	-31	-27	-29	-23	-186	-326
Subtotal	-275	-274	-295	-317	-332	-342	-370	-380	-401	-421	-448	-469	-1,656	-3,774
Total Mandatory Outlays, Net of Offsetting Receipts	**2,735**	**2,859**	**2,979**	**3,201**	**3,337**	**3,469**	**3,723**	**3,945**	**4,139**	**4,456**	**4,508**	**4,878**	**16,709**	**38,635**
Memorandum:														
Outlays, Net of Offsetting Receipts														
Medicare	644	695	741	836	862	878	990	1,060	1,134	1,279	1,232	1,414	4,306	10,425
Major health care programs	1,126	1,187	1,250	1,370	1,426	1,474	1,622	1,727	1,836	2,017	2,011	2,237	7,141	16,969

Source: Congressional Budget Office.

Data on outlays for benefit programs in this table generally exclude administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life).

a. Excludes the effects of Medicare premiums and other offsetting receipts. (Net Medicare spending, which includes those offsetting receipts, is shown in the memorandum section of the table.)

b. Premium tax credits are federal subsidies for health insurance purchased through the marketplaces established by the Affordable Care Act. Related spending consists alm ost entirely of payments for risk adjustment and the Basic Health Program.

c. Includes outlays for the American Opportunity Tax Credit and other credits.

d. Includes Temporary Assistance for Needy Families, Child Support Enforcement, Child Care Entitlements to States, and other programs that benefit children.

e. Includes benefits for retirement programs in the civil service, foreign service, and Coast Guard; benefits for smaller retirement programs; and annuitants' health care benefits.

f. Includes veterans' compensation, pensions, and life insurance programs. (Outlays for veterans' health care are classified as discretionary.)

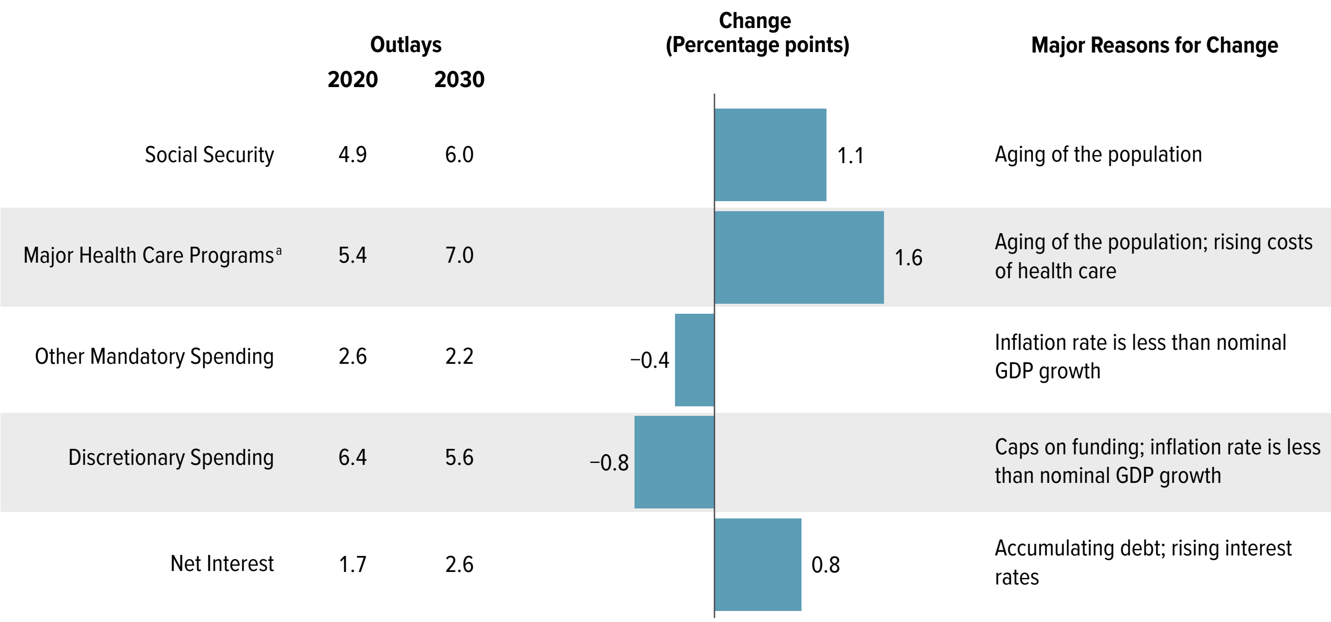
g. Cash payments from Fannie Mae and Freddie Mac to the Treasury are recorded as offsetting receipts in 2019 and 2020. Beginning in 2021, CBO's estimates reflect the net lifetime costs—that is, the subsidy costs adjusted for market risk—of the guarantees that those entities will issue and of the loans that they will hold. CBO counts those costs as federal outlays in the year of issuance.

h. Includes premium payments, recoveries of overpayments made to providers, and amounts paid by states from savings on Medicaid's prescription drug costs.

Figure 1-7.

Changes in Projected Outlays From 2020 to 2030

Percentage of GDP



Source: Congressional Budget Office.

GDP = gross domestic product.

a. Consists of outlays for Medicare (net of premiums and other offsetting receipts), Medicaid, the Children's Health Insurance Program, premium tax credits, and related spending.

those limits and are formulated on the basis of principles and rules that are largely set in law. In accordance with section 257 of the Deficit Control Act, CBO bases its projections for individual accounts on the most recent appropriations and applies the appropriate inflation rate to project funding for future years.[11] After account-level projections are made, the total amount of budget authority is adjusted to comply with the caps on discretionary funding through 2021. Projections for years after 2021 reflect the assumption that discretionary funding keeps pace with inflation.

Some elements of discretionary funding are not constrained by the caps—for most of those exceptions, the caps are adjusted to accommodate the provided funding. In particular, adjustments to the caps are made for all appropriations designated for overseas contingency operations (OCO) and emergency requirements. Subject to certain limits, additional adjustments are made for funding designated for disaster relief activities, some efforts to reduce overpayments in benefit programs, wildfire suppression, and (for this year only) activities related to the 2020 census. In addition, in accordance with the 21st Century Cures Act (P.L. 114-255), a portion of funding for certain authorized activities—up to amounts specified in law—is exempt from the caps. For those elements not constrained by the caps, funding is assumed to grow with inflation from the amounts provided in 2020 or to adhere to specified limits for those activities while the caps are in place.[12]

In CBO's baseline, discretionary budget authority totals $1.4 trillion in both 2020 and 2021, including

11. The Deficit Control Act specifies which measures of inflation CBO should use: Discretionary funding related to federal personnel is adjusted using the employment cost index for wages and salaries of workers in private industry; other discretionary funding is adjusted using the gross domestic product price index.

12. For more information on the adjustments to the discretionary funding caps, see Congressional Budget Office, *Final Sequestration Report for Fiscal Year 2020* (January 2020), www.cbo.gov/publication/55995.

$113 billion in 2020 and $114 billion in 2021 for OCO and other activities not constrained by the caps (see Table 1-4).[13] The amount for 2020 that is constrained by the caps—$1,304 billion—is $16 billion more than the overall limit on discretionary funding for this year; that excess occurs because the appropriation acts for 2020 included provisions that were estimated to reduce budget authority for mandatory programs.[14] For 2021, the remaining amount of projected budget authority is equal to the cap, or $1,298 billion.

Over the 2020–2030 period, total discretionary budget authority is projected to increase by 2.2 percent a year, on average. Measured in dollar terms, the outlays that would flow from the projected budget authority would rise from $1.4 trillion in 2020 to $1.8 trillion in 2030, for an average yearly increase of 2.3 percent. Measured as a share of GDP, however, discretionary outlays would drop from 6.4 percent in 2020 to 5.6 percent in 2030. That 2030 percentage would be the smallest in any year since 1962 (the earliest year for which such data have been reported); by comparison, discretionary outlays averaged 8.3 percent of GDP over the past 50 years, although they were as low as 6.0 percent of GDP in 1999.

Defense Spending. By CBO's estimate, discretionary funding for defense programs in 2020 currently totals $746 billion, including $72 billion for OCO and $8 billion for activities designated as emergency requirements. Defense outlays, which amounted to $676 billion in 2019, will increase by $28 billion (or 4 percent), to $705 billion, the agency estimates. Outlays are projected to increase by $9 billion (or 3 percent) for operation and maintenance, $9 billion (or 7 percent) for procurement, $6 billion (or 7 percent) for research, development, test, and evaluation, and $4 billion (or 3 percent) for military personnel, among other smaller changes in other areas.

In 2021, budget authority for defense programs is projected to equal $753 billion, an increase of $7 billion (or 1 percent) from the 2020 amount. Most of that increase is constrained by the cap on defense funding, which is scheduled to rise by $5 billion (or less than 1 percent) from 2020 to 2021. The remaining $2 billion reflects increases in projected funding for OCO and emergency requirements, which grows with inflation. After 2021, defense funding is projected to grow by 2.5 percent a year, on average, reaching $937 billion in 2030. Over the same period, CBO projects, outlays for defense programs would grow at a rate similar to that of budget authority, rising from $752 billion in 2022 to $906 billion in 2030. As a percentage of GDP, discretionary outlays for defense are projected to fall from 3.2 percent in 2020 to 2.8 percent in 2030.

Nondefense Spending. For 2020, nondefense discretionary funding in CBO's baseline totals $671 billion. That amount includes $33 billion that is not limited by the caps on discretionary budget authority (including $18 billion for disaster relief). CBO estimates that nondefense discretionary outlays will increase by $41 billion (or 3 percent) in 2020, to $701 billion. Among the largest components of that increase are $5 billion for the 2020 census, $5 billion for agriculture programs, and $4 billion for veterans' benefits and services. The remaining growth in nondefense discretionary outlays is the result of smaller increases in spending for various programs.

For 2021, CBO's projection of nondefense discretionary budget authority totals $659 billion, $12 billion (or 2 percent) less than 2020 amounts. Although the cap on nondefense funding increases by $5 billion in 2021, CBO estimates that complying with the cap would require a $12 billion reduction in the amount of budget authority provided for activities that are constrained by it, unless the appropriation acts for 2021 contained provisions that would reduce mandatory budget authority. Projected funding for activities that are not limited by the cap on nondefense discretionary funding remains at $33 billion.

After 2021, funding is projected to grow by 2.6 percent a year, on average, reaching $828 billion in 2030. Discretionary outlays for nondefense programs are

13. The budget authority for 2020 was provided in two omnibus appropriation acts: the Consolidated Appropriations Act, 2020 (P.L. 116-93), and the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), both enacted on December 20, 2019. In addition, P.L. 116-94 included obligation limitations for certain transportation programs totaling $61 billion for 2020. Those limitations are not constrained by the caps on discretionary funding.

14. When appropriation acts include changes that reduce mandatory funding, the estimated savings are credited against the discretionary funding provided by those acts when assessing whether the appropriation acts comply with the caps. Once in law, however, any such savings are incorporated into CBO's baseline projections for mandatory spending.

Table 1-4.

CBO's Baseline Projections of Discretionary Spending

Billions of Dollars

	Actual, 2019[a]	2020[a]	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total 2021–2025	Total 2021–2030
Budget Authority														
Defense	719	746	753	772	792	812	832	852	873	894	915	937	3,962	8,433
Nondefense	658	671	659	679	699	716	736	753	772	789	808	828	3,489	7,440
Total	**1,377**	**1,417**	**1,412**	**1,452**	**1,491**	**1,528**	**1,568**	**1,606**	**1,645**	**1,683**	**1,723**	**1,765**	**7,451**	**15,873**
Outlays														
Defense	676	705	728	752	767	781	806	825	844	870	879	906	3,834	8,159
Nondefense	660	701	715	740	752	768	788	806	825	844	863	884	3,763	7,985
Total	**1,336**	**1,406**	**1,444**	**1,492**	**1,518**	**1,549**	**1,594**	**1,631**	**1,670**	**1,714**	**1,743**	**1,790**	**7,597**	**16,144**
Memorandum:														
Caps on Budget Authority Specified in the Budget Control Act (As Amended), Including Automatic Reductions to the Caps														
Defense	647	667	672	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	597	622	627	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	**1,244**	**1,288**	**1,298**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Adjustments to the Caps[b]														
Defense	72	79	81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	44	33	33	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	**116**	**113**	**114**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Discretionary Outlays That Are Shifted in CBO's Baseline[c]	0	0	0	5	*	-5	0	0	0	6	-6	0	n.a.	n.a.

Source: Congressional Budget Office.

CBO's current baseline projections incorporate the assumption that the caps on discretionary budget authority and the automatic enforcement procedures specified in the Budget Control Act of 2011 (as amended) remain in effect through 2021.

Nondefense discretionary outlays are usually greater than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund that is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is considered mandatory.

n.a. = not applicable; * = between zero and $500 million.

a. The amount of budget authority for 2019 and 2020 in CBO's baseline does not match the sum of the caps on funding plus adjustments to the caps. That occurs mostly because estimated reductions in mandatory budget authority stemming from provisions in appropriation acts for those years were credited as offsets to new discretionary budget authority in judging the acts' compliance with the caps. In the baseline, those changes to mandatory budget authority appear in their normal mandatory accounts.

b. Some or all of the discretionary funding related to seven types of activities is not constrained by the caps; for most of those activities, the caps are adjusted to accommodate such funding, up to certain limits. Specifically, appropriations designated for overseas contingency operations and activities designated as emergency requirements are assumed to grow with inflation after 2020, and the caps are adjusted accordingly. For four other activities—disaster relief, wildfire suppression (for 2020 and 2021), activities related to the 2020 census (for this year only), and certain efforts to reduce overpayments in benefit programs—the extent to which the caps can be adjusted is subject to annual constraints, as specified in law. In addition, the 21st Century Cures Act (Public Law 114-255) requires that discretionary funding for certain authorized activities—up to amounts specified in law—be excluded from calculations of funding subject to the caps.

c. When October 1 (the first day of the fiscal year) falls on a weekend, as it will in calendar years 2022, 2023, and 2028, payments for military pay that would have ordinarily been made on that day are instead made at the end of September and thus are shifted into the previous fiscal year.

estimated to be $715 billion in 2021; they would then follow the same trajectory as budget authority, increasing to $884 billion in 2030.[15] Relative to the size of the economy, outlays for nondefense discretionary programs would fall from 3.2 percent of GDP in 2020 to 2.8 percent of GDP in 2030.

Net Interest

In the budget, net outlays for interest primarily encompass the government's interest payments on federal debt, offset by interest income that the government receives. Net outlays for interest are dominated by the interest paid to holders of the debt that the Treasury Department issues to the public. The Treasury also pays interest on debt issued to trust funds and other government accounts, but such payments are intragovernmental transactions that have no effect on the budget deficit.

In CBO's projections, net outlays for interest in 2020 edge up to $382 billion, from $376 billion in 2019. Those outlays more than double over the next 10 years, reaching $819 billion in 2030. As a result, under current law, net outlays for interest are projected to grow from 1.7 percent of GDP in 2020 to 2.6 percent in 2030.

Two primary factors affect the federal government's net interest costs: the amount of debt held by the public (which is projected to be 87 percent more at the end of 2030 than it was at the end of 2019) and interest rates on Treasury securities. The projected increase in federal debt is the most significant factor affecting the projected growth in net outlays for interest.

The increase in interest rates accounts for about two-fifths of the projected growth in net interest outlays over the projection period. CBO estimated the contribution of rising interest rates to net interest costs by keeping interest rates on marketable debt held by the public at their values in the fourth quarter of fiscal year 2019. For example, the rate paid on 10-year Treasury notes was assumed to remain at 1.8 percent, rather than rising to 3.1 percent in 2030, as CBO projects in its economic forecast. (For a more detailed discussion of CBO's forecast of interest rates, see Chapter 2.) In that scenario, outlays for interest in 2030 would be $284 billion lower (including the effects of debt service) than in CBO's baseline projections, and debt would be $1.3 trillion lower at the end of that year.

Revenues

Federal revenues in 2019 totaled $3.5 trillion, or 16.3 percent of GDP. Under current law, CBO estimates, revenues will increase by 4.9 percent in 2020, to just over $3.6 trillion. As a percentage of GDP, revenues are expected to rise to 16.4 percent this year, below the average of 17.4 percent recorded over the past 50 years. Over the next decade, CBO projects, revenues would rise markedly, reaching 18.0 percent of GDP by 2030. That growth—which mainly reflects an increase in revenues from individual income taxes and, to a lesser extent, from corporate income taxes and estate and gift taxes—would slow because of a decline in receipts from excise taxes. Other sources of revenue are projected to grow at the same pace as GDP (see Figure 1-8).

In CBO's baseline, the largest movements in revenues over the next decade are as follows:

- **Individual income tax receipts** increase relative to GDP between 2020 and 2030, mostly because the expiration of provisions of the 2017 tax act is projected to increase receipts relative to taxable personal income (see Figure 1-9). Real bracket creep and other factors (explained in more detail below) also contribute to that increase.

- **Corporate income tax receipts** increase relative to GDP between 2020 and 2030, reaching their peak in 2025 and gradually declining thereafter. In 2030, corporate receipts are projected to be higher relative to GDP than in 2020, largely because of scheduled changes in provisions of the 2017 tax act that will broaden the tax base or increase certain tax rates. The decline in corporate receipts after 2025 is mostly attributable to the end of scheduled payments for a onetime tax on previously untaxed foreign profits.

- **Estate and gift tax receipts** increase slightly relative to GDP between 2020 and 2030, primarily because of the expiration of a provision of the 2017 tax act that doubled the exemption amount through tax year 2025.

15. Nondefense discretionary outlays are usually greater than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund that is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is considered mandatory.

Figure 1-8.

Changes in Projected Revenues From 2020 to 2030

Percentage of GDP

	Revenues 2020	Revenues 2030	Change (Percentage points)	Major Reasons for Change
Individual Income Taxes	8.1	9.5	1.4	Expiration of certain provisions of the 2017 tax act at the end of calendar year 2025; real bracket creep[a]
Payroll Taxes	5.9	5.9	*	Not applicable
Corporate Income Taxes	1.1	1.3	0.2	Scheduled changes in tax rules enacted in the 2017 tax act
Other Taxes	1.4	1.2	−0.1	Repeal of a tax on health insurance providers

Source: Congressional Budget Office.

GDP = gross domestic product; * = between zero and 0.05 percentage points.

a. Real bracket creep occurs when more income is pushed into higher tax brackets because people's income is rising faster than inflation.

- **Excise tax receipts** decline in 2021 following the final payment of a tax on health insurance providers, which was recently repealed. Excise taxes continue to gradually decline as a share of GDP thereafter, along with the tax bases on which many excise taxes are levied.

Individual Income Taxes

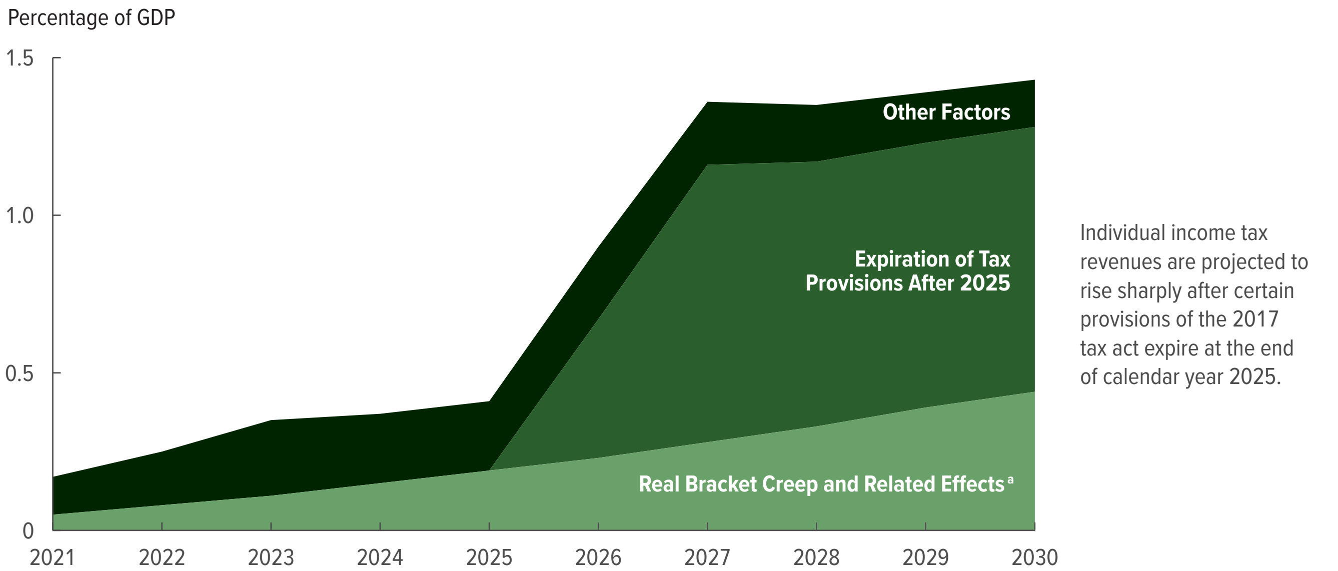
In 2019, receipts from individual income taxes totaled $1.7 trillion, or 8.1 percent of GDP. Under current law, receipts from individual income taxes are expected to rise by 4 percent, to almost $1.8 trillion in 2020. That percentage increase is about the same as the increase expected for nominal GDP, so individual income tax receipts would remain at 8.1 percent of GDP. CBO projects that, if current laws remained unchanged, individual income tax receipts would rise by 1.4 percentage points as a share of economic output over the next decade.

Scheduled Tax Changes After 2025. The most significant factor pushing up taxes relative to income is the scheduled expiration, at the end of calendar year 2025, of nearly all the individual income tax provisions of the 2017 tax act. The provisions that are scheduled to expire include lower statutory tax rates, the higher standard deduction, the repeal of personal exemptions, the expansion of the child tax credit, and the deduction for qualified business income. Those expirations would cause tax liabilities to rise in calendar year 2026, boosting individual income tax receipts relative to GDP by 0.8 percentage points.

Real Bracket Creep and Related Effects. The second largest factor pushing up taxes relative to income arises from the way certain parameters of the tax system are scheduled to change over time in relation to growth in income, which reflects the effects of both real (inflation-adjusted) economic activity and inflation. The most important component of that effect, real bracket creep, occurs because income tax brackets are indexed only to inflation. If income grows faster than inflation, as generally occurs when the economy is expanding, more income is pushed into higher tax brackets. Still other parameters of the tax system, including the amount of the child tax credit, are fixed in nominal dollars and are not adjusted for inflation. In CBO's baseline, real bracket creep and related effects cause projected revenues

Figure 1-9.

Reasons for the Growth of Individual Income Tax Receipts in CBO's Baseline Projections



Source: Congressional Budget Office.

GDP = gross domestic product.

a. Real bracket creep occurs when more income is pushed into higher tax brackets because people's income is rising faster than inflation.

measured as a percentage of GDP to rise by 0.4 percentage points from 2020 to 2030.[16]

Other Factors. Over the next decade, several other factors would raise projected receipts as a share of GDP by 0.2 percentage points, on net, in CBO's estimation. In addition to the individual income tax provisions that are scheduled to expire after 2025, other tax rules are also scheduled to change. Rules allowing accelerated depreciation deductions for certain business investments are scheduled to phase out between 2022 and 2027, and a number of tax provisions that were recently extended temporarily by the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), are scheduled to expire after 2020.

Also, as the population continues to age, taxable retirement income will tend to grow more rapidly than GDP. CBO expects the retirement of members of the baby-boom generation to cause a gradual increase in distributions from tax-deferred retirement accounts and traditional defined benefit pension plans, as well as taxable Social Security benefits. Partially offsetting those revenue increases is a projected decline in realizations of capital gains relative to the size of the economy. Those realizations have been larger in the past several years than their historical average share of GDP (after accounting for differences in applicable tax rates). CBO projects that such realizations would gradually return to levels consistent with their historical average by 2030.

Corporate Income Taxes

In 2019, receipts from corporate income taxes totaled $230 billion, or 1.1 percent of GDP. CBO expects corporate tax receipts to rise by 2 percent in 2020, remaining at 1.1 percent of GDP. Under current law, CBO projects, corporate income tax receipts would rise through 2025, reaching 1.4 percent of GDP. After 2025, receipts would begin to decline, falling to 1.3 percent of GDP in 2030. That pattern reflects the varying effects over time of provisions of the 2017 tax act and other factors.

Provisions of the 2017 Tax Act. A number of provisions of the 2017 tax act include scheduled changes over the next decade that will increase corporate taxes by reducing allowable deductions or increasing tax rates on certain

16. See Congressional Budget Office, "How Income Growth Affects Tax Revenues in CBO's Long-Term Budget Projections" (June 2019), www.cbo.gov/publication/55368.

types of income. Those changes contribute 0.1 percentage point to the increase in receipts as a share of GDP between 2020 and 2030.

Most significantly, provisions allowing firms to immediately deduct from their taxable income 100 percent of their investments in equipment are scheduled to phase out between 2023 and 2026. Additionally, in 2022, a stricter limit on the deductibility of interest expenses will take effect, and firms will be required to capitalize and amortize certain expenditures for research and experimentation as they are incurred over a five-year period, rather than immediately deducting them. Rules related to the taxation of profits abroad will also change in 2026, increasing revenues in subsequent years.[17]

Receipts will be further affected over the next decade by the end of the scheduled payments for a onetime tax on certain foreign profits. That tax applied to foreign profits for which U.S. taxes had been deferred under previous law. Taxes on those earnings, which are based on the value of those profits as of late 2017 (and which are unrelated to future business activity), can be paid in installments over eight years. Because the required installments are not equal in size, the effect of those receipts in CBO's baseline varies over the 2019–2026 period. As a result, those payments boost receipts to varying degrees from 2019 through 2026 but not in subsequent years, thereby contributing to the reduction in receipts relative to GDP through 2030.

Other Factors. Over the next decade, other factors would raise projected receipts as a share of GDP by 0.1 percentage point. CBO projects that domestic corporate profits would increase slightly relative to GDP over the next decade. That anticipated increase in profits would cause corporate tax receipts to rise as a share of the economy. In addition, a number of tax provisions that were recently extended temporarily by the Further Consolidated Appropriations Act, 2020, are scheduled to expire after 2020, which would also boost receipts over the next several years.

Receipts From Other Sources

Receipts from all other sources, which are described below, totaled $1.5 trillion in 2019, or 7.1 percent of GDP. Those receipts are projected to remain between 7.1 percent and 7.3 percent of GDP over the next decade.

Payroll Taxes. Receipts from payroll taxes, which fund social insurance programs—primarily Social Security and Medicare—totaled $1.2 trillion in 2019, or about 5.9 percent of GDP. Those receipts are projected to remain at that share throughout the next decade because workers' earnings, which constitute most of the payroll tax base, remain relatively stable as a share of GDP in CBO's economic forecast.

Estate and Gift Taxes. Revenues from estate and gift taxes totaled $17 billion in 2019, or just below 0.1 percent of GDP. Revenues from that source are projected to rise to just above 0.1 percent in 2027 and subsequent years after a provision of the 2017 tax act that doubled the amount of the estate and gift tax exemption expires at the end of calendar year 2025.

Excise Taxes. Excise taxes are levied on the production or purchase of particular types of goods or services, including motor fuels, tobacco, alcohol, and aviation services. Collections of excise taxes totaled $99 billion in 2019, or 0.5 percent of GDP. Those receipts are projected to remain at that level in 2020 before declining to 0.3 percent of GDP by 2030. That decline would occur primarily because many excise taxes are imposed as a fixed dollar amount per unit sold, and the number of units is growing slowly or declining.

In addition, an annual fee on health insurance providers was recently repealed by the Further Consolidated Appropriations Act, 2020. Because the final payment of that fee is due in September 2020, it will boost receipts this year but not in subsequent years.

Customs Duties. Collections of customs duties, which are assessed on certain imports, totaled 0.3 percent of GDP in 2019. Those receipts are projected to rise to 0.4 percent of GDP in 2020 and remain at that level throughout the next decade. Those duties include tariffs imposed by the Administration beginning in 2018 that have increased customs duties by roughly 0.2 percent of GDP.[18] CBO's baseline incorporates the assumption that tariffs, along with any subsequent exemptions provided

17. For additional explanation of the tax provisions included in the 2017 tax act, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), pp. 108–110, www.cbo.gov/publication/53651.

18. The Administration's recent actions on tariffs were taken under authority granted in section 232 of the Trade Expansion Act of 1962 and sections 201 and 301 of the Trade Act of 1974.

by the Administration, continue throughout the projection period at the rates in effect as of January 7, 2020, when the economic forecast was completed.[19]

Remittances From the Federal Reserve. The income produced by the various activities of the Federal Reserve System, minus the cost of generating that income and the cost of the system's operations, is remitted to the Treasury and counted as revenue. The central bank remitted $53 billion to the Treasury in 2019, or 0.2 percent of GDP. CBO expects remittances to increase to 0.3 percent of GDP in 2020, primarily as a result of lower short-term interest rates, which reduce the Federal Reserve's interest expenses and therefore increase remittances. CBO projects that remittances would remain at 0.3 percent of GDP throughout the next decade.

Miscellaneous Fees and Fines. Receipts from other fees and fines totaled $32 billion in 2019, or 0.2 percent of GDP. CBO projects that, under current law, collections of fees and fines would remain between 0.1 percent and 0.2 percent of GDP in each year through 2030.

Tax Expenditures

The tax rules that form the basis for CBO's projections include an array of exclusions, deductions, preferential rates, and credits. Those provisions reduce revenues for any given level of tax rates in both the individual and corporate income tax systems. Many of those provisions are called tax expenditures because, like government spending programs, they provide financial assistance for particular activities as well as to certain entities or groups of people.[20]

Unlike many spending programs, tax expenditures are not subject to annual appropriations. Because of that budgetary treatment, tax expenditures are less transparent than discretionary spending or spending on benefit programs. In fact, most tax expenditures are not explicitly recorded in the federal budget. The one exception is the portion of refundable tax credits that exceeds a taxpayer's tax liability; that amount is recorded as mandatory spending in the budget.

Tax expenditures contribute to the budget deficit just as federal spending does. They also influence people's choices about working, saving, and investing, and they affect the distribution of income. The Congressional Budget and Impoundment Control Act of 1974 requires the federal budget to list tax expenditures, and every year the staff of the Joint Committee on Taxation (JCT) and the Treasury's Office of Tax Analysis each publish estimates of individual and corporate income tax expenditures.[21]

19. Specifically, CBO's baseline projections incorporate the assumption that, in cases in which the Administration exercises its broad authority to impose tariffs without legislative action, the tariffs in effect when this analysis was completed on January 7, 2020, would continue permanently without planned or unplanned changes. The tariffs imposed during the past two years include those on imports of solar panels and certain appliances, which took effect on February 7, 2018; on steel and aluminum imports from most countries, which took effect on March 23, 2018; and on a range of products imported from China, the first of which took effect on July 6, 2018.

    On January 15, 2020, the United States and China signed a new trade agreement. The Administration announced that tariffs on certain imports from China that were imposed at a rate of 15 percent on September 1, 2019, will be reduced to 7.5 percent on February 14, 2020. Neither the planned changes to trade policy included in that agreement, nor changes to tariffs imposed after January 7, 2020, are included in CBO's current baseline projections.

20. Sec. 3(3) of the Congressional Budget and Impoundment Control Act of 1974 (codified at 2 U.S.C. §622(3) (2006)) defines tax expenditures as "those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."

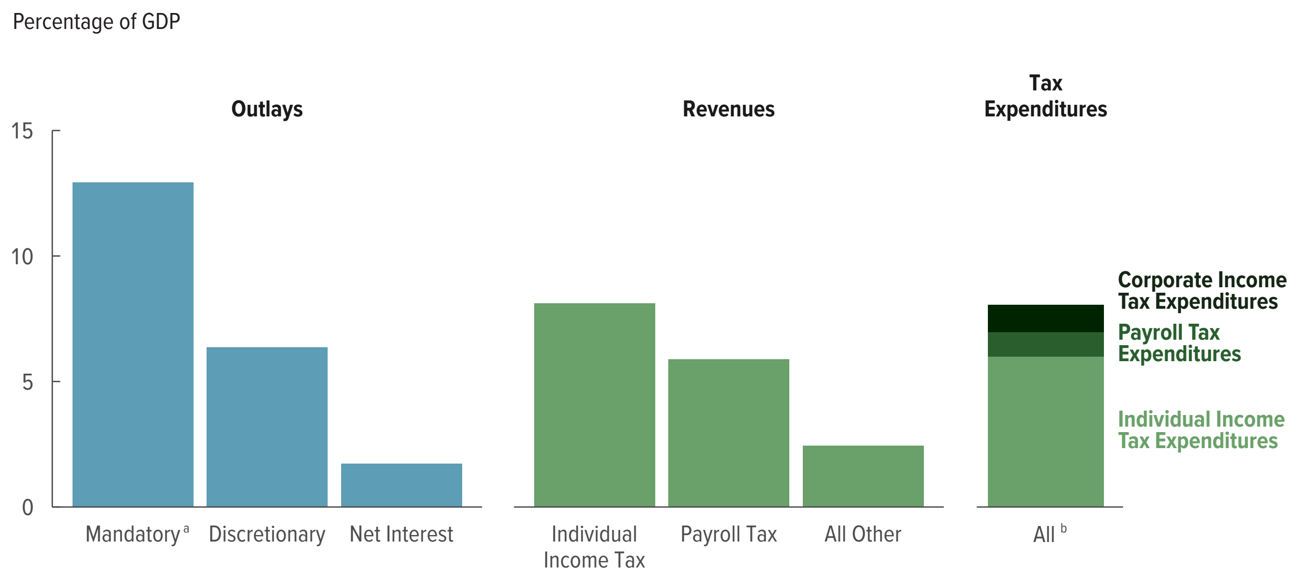
21. For this analysis, CBO followed JCT's definition of tax expenditures as deviations from a "normal" income tax structure. For the individual income tax, that structure incorporates existing regular tax rates, the standard deduction, personal exemptions, and deductions of business expenses. For the corporate income tax, that structure includes the statutory tax rate, generally defines income on an accrual basis, and allows for cost recovery according to a specified depreciation system that is less favorable than under current law. For more information, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2019–2023*, JCX-55-19 (December 2019), www.jct.gov/publications.html?func=startdown&id=5238.

    Unlike JCT, CBO includes estimates of the largest payroll tax expenditures. As defined by CBO, a normal payroll tax structure includes the existing payroll tax rates as applied to a broad definition of compensation—which consists of cash wages and fringe benefits. The Treasury's definition of tax expenditures is broadly similar to JCT's. See Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2020: Analytical Perspectives* (March 2019), pp. 171–228, https://go.usa.gov/xdCcf (PDF, 6.5 MB).

Figure 1-10.

Outlays, Revenues, and Tax Expenditures in 2020

Tax expenditures, which are projected to total more than $1.8 trillion in 2020, reduce revenues and, like spending programs, contribute to the deficit.



Source: Congressional Budget Office, using estimates by the staff of the Joint Committee on Taxation.

GDP = gross domestic product.

a. The outlay portions of refundable tax credits are included in tax expenditures as well as mandatory outlays. In 2020, they are estimated to total 0.6 percent of GDP.

b. This total is the sum of the estimates for all of the separate tax expenditures and does not account for interactions among them. However, CBO estimates that in 2020, the total of all tax expenditures roughly equals the sum of each considered separately. Because estimates of tax expenditures are based on people's behavior with current provisions of the tax code in place, they do not reflect the amount of revenues that would be raised if those provisions were eliminated and taxpayers adjusted their activities in response.

Tax expenditures have a large effect on the federal budget. In fiscal year 2020, the value of the more than 200 tax expenditures in the individual and corporate income tax systems will total about $1.8 trillion—or 8.0 percent of GDP—if their effects on payroll as well as income taxes are included.[22] That amount, which was calculated by CBO on the basis of estimates prepared by JCT, equals almost half of all federal revenues that are projected to be collected in 2020 and exceeds all projected discretionary outlays combined (see Figure 1-10).[23] Estimates of tax expenditures measure the difference between households' tax liabilities under current law and the tax liabilities they would have incurred if the provisions generating those tax expenditures were repealed but households' behavior was unchanged. Such estimates do not represent the amount of revenues that would be raised if those provisions were eliminated, because the changes in incentives that would result from eliminating those provisions would lead households to modify their behavior in ways that would mute the impact on revenues.

22. Most estimates of tax expenditures include only their effects on individual and corporate income taxes. However, tax expenditures can also reduce the amount of income subject to payroll taxes. Tax expenditures that reduce the tax base for payroll taxes also decrease spending for Social Security by reducing the earnings base on which Social Security benefits are calculated.

23. That total does not incorporate the changes to tax law made by the Further Consolidated Appropriations Act, 2020. JCT estimated that the act will reduce revenues by about $35 billion in 2020. For more information on the magnitude of each separate tax expenditure, see Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2019–2023*, JCX-55-19 (December 2019), www.jct.gov/publications.html?func=startdown&id=5238. For more information on how that total was determined, see Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), pp. 99–102, www.cbo.gov/publication/54918.